PASSAGE PLAN FORM

FORM: MAROPS 005

PASSAGE PLANNING - GENERAL INSTRUCTIONS FOR COMPLETION

a) Vessel's Details

- Please note that all field marked by pale yellow colour are to be filled in, even those you can see on the right side of the spreadsheet. These will not appear in the print-out, as the print area is defined
- Fill cells in column 'C' as required. Under cell 9C be sure to enter Loaded or Ballast as this choses which block coeficient is chosen by the program under cell 26C.
- DO NOT fill cell 26C as this will be completed automatically.
- In cell I26 enter Loaded mean draft, in cell I27 enter Ballast mean draught.
- In cell J26 enter the block coefficient that equates to the mean draught when Loaded, in cell J27 enter the block coefficient that equates to the mean draught in
- The program will then choose one of these block coefficients to enter in cell 26C depending on whether you typed 'Loaded or Ballast in cell 9C
- The Air draft calculation take into account the horizontal distance between the aft perpendicular and the point below the highest structure (DHA). Record Length
- The calculation for recording max overhead clearance when passing under any overhead limiting structure can be done in cells C31 and C32

b) Voyage Info

Some fields are updated utomatically. Following fields are to be completed:

- Nautical Publications/Reporting Schemes
- Charts
- Reference Charts
- Navigational Aids (if different from the example)

- Navarea Wngs and T and P Notices, No. Charts Affected navarea warnings and I and P corrections must be mentioned nere for paper charts. Eculo vessels need not mention these nere nowever, Eculo vessels that have to manually annlu T and D carrections remaire to state details here

- Navtex Local and Coastal warnings
- Speed (in intervals) for the vessel in order to get the duration of sea passage calculated
- An additional space has been inserted to include ECDIS related safety settings. These are NOT to be changed without Masters permisson

c) Master's Comments

Please follow the instructions given in red under the respective column heads in the spreadsheet

d) ECDIS vessels Passage plan checklist

For use by ECDIS vessels. Answers to be in Yes/No and NA. Insert remarks as appropriate

d) Waypoints (BP/PP/PB)

- Please enter Latitude (N/S) and data as taken out from chart, i.e. for N 35° 14' 48" as N 35 14.8, the input will be calculated in decimals anyhow. In addition you
- Another thing to remember due to field formats if you have any latitude or longitude figure being '0', enter 0.00001, as then the figure '0' will appear in the
- The next item to be filled is the respective geographical name of the waypoint.
- On the right side of the form under the brightly coloured headers are Weather Allowance, Minimum Available Charted Depth and Tide Allowance.
- IT IS RECOMMENDED TO RE-CHECK THE WEATHER ALLOWANCE AND HEIGHT OF TIDE WHEN BERTHING. ANY CHANGE IN BERTHING WILL REQUIRE THE
- The 'Weather Allowance' (in meters), should include "Sea State Effect" (swell and waves) and "Seasonal Height Variations" (due to barometric pressure etc.)
- If you expect swell or waves, especially important during approaches to pilot station or anchorages, do not forget swell/waves will reduce your UKC
- Enter minimum available charted depth in between the waypoints. Take the minimum depth in between waypoints off your chart, as the higher values are not

e) Form (BP/PP/PB)

The following items are to be entered:

- Permitted XTE (THE XTE WILL NEED TO BE SMALL IN NARROW CHANNELS, EVEN ZERO IN PLACES AND ON THE OPEN SEA 0.5 OR EVEN 1 MILE MIGHT BE
- Fix Method (i.e. GPS, Radar, Cellestial)
- Fix Intervals (Enter your appropriate intervals REMEMBER THAT THE FIX INTERVAL SHOULD BE SUCH THAT THE VESSEL CANNOT STAND INTO DANGER
- -ECDIS vessels can mention "Continuous" in the FIX Interval column. However they also do need to manually verify positions when approaching or leaving port
- ARLS, Sailing Directions, Charts (as applicable)
- In the columns "Required Engine Status" enter "Manuvering speed/Sea speed with notice or Full sea speed" as applicable
- The columns CATZOC Zone and UKC ACCURACY are for use on ECDIS vessels only. UKC ACCURACY depicts the Depth accuracy 'that will depend in the ZOC of the
- The column S gives the accuracy of the depth for that ENC. Officers should apply the DEPTH ACCURACY to the UKC. This may be subtracted or added to the
- For paper chart vessel: In Col N, the calculated UKC of the vessel will be checked with the applicable minimum UKC allowed, and if the result is "YES", then it

f) Squat UKC (BP/PP/PB)

- Calculations are automated. The DWA/FWA will need to be entered in spreadsheet 'Squat UKC BP/PP/PB' depending on the density of water for the red marked
- In addition the vessel's speed needs to be entered in intervals in the Squat table (yellow highlighted), the relevant squat is then calculated automatically.
- Select the "HEEL CORRECTION" in F30. The heel must be entered in the cell provided and this will be added to the draft for calculating the UKC
- The Columns CATZOC and Depth Accuracy are applicable to ECDIS vessels only
- Select the required UKC (10%, 15% or 50%) from the drop menu as per the UKC policy (Col O)
- Select the required SQUAT CORRECTION TYPE (Open or Confined) from the drop menu. Refer to Marine manual appendix for guidance.

This form provides two method for calculating UKC:

METHOD 1: Providing UKC accuracy values as given by IHO for use by the master as deemed appropriate

In this method the master needs to manually apply the UKC ACCURACY (col R in Squat UKC sheets) to the UKC as he deems appropriate in order to get the final

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How to calculate: Ref. Squat UKC sheets

- Depending on the ZOC of the ENC, select the appropriate category for the ZOC from the drop down menu in col Q
- The adjoining column R gives the UKC ACCURACY for that ZOC . This is dependent on the depth of water.
- Officers should apply the UKC ACCURACY to the UKC in col M. This may be subtracted or added to the water depth, Subtracting the Depth accuracy from the
- The value of UKC accuracy for zone A2 and B is same

Caution: ECDIS vessels must take into account the effect of "UKC accuracy" in col R of the Squat UKC sheet when calcuating the vessels

METHOD 2: Calculating UKC by automatically subtracting CATZOC accuracy figures

In this method the UKC ACCURACY figure (col R in Squat UKC sheets) is subtracted from Col M (Squat UKC sheet) automatically. This method however does

How to calculate: Ref. Squat UKC sheets

- Depending on the ZOC of the ENC, select the appropriate category for the ZOC from the drop down menu in col Q
- Column S gives the final UKC for that ZOC (by subtracting Col R from Col M). This column does not give any results for CATZOC Zones D and U.
- Col T gives options "Yes" or "NO GO" depending if the UKC is sufficient or not. This column will not provide any values and shows "cannot be assessed" in
- ♦ In case of Col T gives "Cannot be assessed", the vessels must:

GENERAL INSTRUCTIONS:

- Keep the blank passage planning form as a blank. Do this by opening it then saving it under a new name for the voyage you are planning. That way
- If more waypoints are needed than are provided it is necessary to stop the voyage at a suitable point (I.e. the locks at Antwerp) and start a new
- If the vessel anchors before embaking the Pilot remember to make a new form for the deviation to anchorage and back to the Pilot Station.

Great Circle Calculations:

The Passage Planning as given here does not provide a Great Circle calculation for your voyages.

Rhumb Line Distance:

The distances obtained from this Plan should be confirmed with those obtained upon plotting courses on the chart

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VESSEL DETAILS

FORM NO: MAROPS 005

Date		21/Jun/18			
Vessel Name		CLIPPER BLISS			
Call Sign :		3FYY4			
Voyage No		V1804	LEG2		
Ballast / Loaded :		LOADED			
From		PUNTA LOBITO	S PERU		
Berth		NO.1			
UTC:		-500			
Tide Datum:		1.5			
То		QING DAO	CHINA		
Berth					
UTC:		-500.0			
Tide Datum:		1.50			
Via UTC :					
Draft F		09.75 m	Length Between perpendiculars (LBP)	173	
Draft Mid		09.95 m	Horizontal Distance between highest point and Aft perpendicular (DHA)	13.57	
Draft A		10.15 m	ormania.		
Trim		00.40 m			Draft Cb
Cb	10.15 m (Block Coefficient)	0.8282	****	LOADED	Mean Draft 9.95 0.8282
Keel to Max. Height	•	44.46 m		BALLAST	Mean Draft
Air Draft		34.34 m			<u> </u>
Service / Sea Speed	(as applied in Voyage Planning)	12.50			
Height of any limiting ov	erhead structure (under which the	02.00 m			
Minimum air clearance	· ·	-32.34 m	(Minimum permissible air clearance is 2.0m)		
					

	Speed Variables Manoeuvring	Loaded	Ballast
1	Full Ahead	14.0	
2	Half Ahead	12.0	
3	Slow Ahead	6.2	
4	Dead Slow Ahead	4.1	



VOYAGE INFORMATION

Date: 21/Jun/18

	Draft
Fwd:	09.75 m
Mid:	09.95 m
Aft:	10.15 m
Trim:	00.40 m
Air:	34.34 m

Vessel Name	:	CLIPPER BLISS

From :	PUNTA LOBITOS
To:	QING DAO
Via :	

Time	
UTC:	-500
UTC:	-500
UTC:	
Time Differ	ence
+/-	0.0

Voyage No: V1804

emark: + = advance / - = retail

Nautical Publications / Reporting Schemes					
Coast Pilot Books	SAILING DIRECTI	ON			
Admiralty List of Radio Signals	NP281(2)NP282(2	2)NP283(2)NP284NP285 NP	286(7)NP286	(6)	
Admiralty List of Lights	NP80 NP87	NP80 NP87			
Admiralty Tide Tables	NP204 NP206				
Tidal Stream Atlas					
Mariner's Handbook	NP100				
Routeing Charts	5128(60 5218(7) 5	5127(6) 5127(7)			
Sailing Directions	NP7 NP8 NP62 NF	P41 NP43 NP32			
Reporting *	Peru /Ecuador shi	p reporting system			
Voyage charts corrected up to	NTM Wk:	WK25/18	Date :	20/JUN	

* Procedures on	chart and	bridge	note book
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RA charte only				
DA Charles Only	/ (ENC's need	not be entered	here)	
2135				
4608	4811	4802	4801	4806
4805	4813	4522	4511	1803
1800	JP10	2293	2347	127
3365	3480	1254	1502	1505
1506	1501			
harts :	BA charts only	/ (ENC's need i	not be mentione	ed here)
	***************************************	***************************************		
	4608 4805 1800 3365 1506	4608 4811 4805 4813 1800 JP10 3365 3480 1506 1501	4608 4811 4802 4805 4813 4522 1800 JP10 2293 3365 3480 1254 1506 1501	4608 4811 4802 4801 4805 4813 4522 4511 1800 JP10 2293 2347 3365 3480 1254 1502 1506 1501

NAVIGAT	IONAL AIDS	
A	RADAR	YES
В	ARPA	YES
С	AIS	YES
D	GLOBAL POSITIONING SYSTEM (GPS)	YES
E	NAVTEX	YES
F	VISUAL BEARINGS	YES
G	FACSIMILE (WEATHER FORECAST), LOCAL WARNING	YES
Н	ECHO SOUNDER	YES
ı	ADMIRALTY PUBLICATIONS - PILOTS, TIDE TABLES, LIST OF LIGHTS, ALRS,	YES
J	TOTAL TIDE USED FOR UKC CALCULATIONS? (YES or MANUAL)	YES
K	BNWAS	YES
L	SAT-C	YES

STEAMING TIME (SEA PASSAGE)				
Knots	Days	Hours		
13.5	28	14		
13.0	29	16		
12.5	30	20		
12.0	01	747		
11.5	02	757		
11.0	04	745		

	NAV	TEX	. S1	ΆΤΙ	ONS
7	UTC	SE	LE	CTE	D
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Navarea Warnings	Tand P Notices	CHART AFFECTED
irea warnings and r and r conections must i ira to etata dataile hara	De memoneu nere lor paper chans, L'ODIO vessi	ers need not mention these nerethowever, соро vessers that have to manually appry т and т сонесто
Navarea XVI ,XII, XIII, XI		T&P Have been drawed on charts
ECG NAVTEX RECORD		

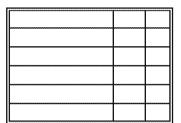
	Navtex local and coastal warnings	
SHOULD BE READ EVERY WATCH.		
	PLS DRAWING ON CHART IF AFFECTED.	

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Anchorage, Contingency anchorage and other Miscellaneous information					
PLS SEE CHART					

ECDIS settings	Setting value	REMARK
	For the voyage following are ECDIS settings	s: These are NOT to be changed without Masters permisson.
SAFETY CONTOUR	14	hip's draught,UKC,Squat,CATZOC,• Tide allowance,DWA,FWA,Wave height, Heel correction,• Rolling allowand
SAFETY DEPTH	11	It is same what was calculated in safety contour setting
DEEP CONTOUR	30	This is a relative term and Master is free to set what he believes could be deep water for him
SHALLOW CONTOUR	11	The shallow contour value need to be equal to or more than the draft of the vessel
SAFETY FRAME:		
AHEAD	900M	Depending on the ship's speed, traffic situation, geographical limitations and manoeuvrability
PORT AND STBD CORRIDOR	30M	is depending on expected traffic situation, ship particulars and geographical limitations (channels, fairways, et

	Prepared by:	Ac	knowledged by:	Ackr	owledged by:		Approved by:
Signature:		Signature:		Signature:		Signature:	
Nav. Off:	LI BINGRU	3rd Officer :	ZHANG CHUANBO	Ch. Offr. :	LIU YINGJIE	Master:	ZHANG MINGFU
Date:	21/JUN	Date:	21/JUN	Date:	21/JUN	Date:	21/JUN
	Acknowledged by:	Ac	knowledged by:	Ackr	nowledged by:	Acl	knowledged by:
Signature:		Signature:		Signature:		Signature:	
Name/		Name/ Rank		Name/ Rank		Name/ Rank	
Rank		Name/ Rank				Name/ Nam	
Date:		Date:		Date:		Date:	



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Notice E/R to SBE before arrive P/S and report relevant port control via VHF

MASTER'S COMMENTS

FORM NO: MAROPS 005

Date : Vessel Name :	21/Jun/18 CLIPPER BLISS					
Voyage No :	V1804	From:	PUNTA LOBITOS	_ To:	QING DAO	
		Naviga	ation			
General order as per NAV.	Bridge Order					
Wide berth to fishing vesse	el and oil well					
Position fixed in var. metho	rde					

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	Environmental
Close sewage out let in	12nm of coast area
Garbage collection sho	uld be based on consideration of what is permitted and what is not permitted to be discharged into the sea
en route, and whether a	garbage type can be discharged to port facilities for re-cycling or reuse. Recepatacles on board can be in
form of drums, metal bi	ns, cans, container bags or wheelie bins.
Crew members must se	egregate and place the garbage in the relevant receptacles as Company Garbage management plan.
The designated Garbag	e Management Personnel is responsible for carrying out or arranging the processing of the Garbage.
	Security
Gangway watch s	hould be maintained all the time
Check visitor's ID card	and make record
MARSEC LEVEL 1	
Master :	ZHANG MINGFU
Signature :	ZITANO IVIII VOI
Oignature .	

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ECDIS VOYAGE PLANNING CHECKLIST

To Be Completed Prior to Departure From Each Port
To be used on ECDIS VESSELS ONLY

Vessel:	CLIPPER BLISS			
Voyage No.:	V1804	Date Vo	yage Commences:	43272
Passage from:	PUNTA LOBITOS	To:	QING DAO	

FORM NO: MAROPS 005

200000000000000000000000000000000000000			Q.
Sr. No	Item	Y/N/NA	Remarks
	Setup Before Departure		
1	Does documentation indicate that the ship's navigation system complies with IMO	YES	
2	Performance Standards for ECDIS? Are written procedures available onboard the vessel for using ECDIS?	YES	
3	Are the Master and officers proficient in the use of ECDIS?	YES	
<u> </u>	Have the Master and officers been provided with:	112	
	•Generic ECDIS training?		
4	•Type-specific training?	YES	
	•ECDIS on board training. Has ECDIS Manual, appendix 5 been completed?		
5	Is the ship equipped with an approved back-up arrangements to ensure safe	NA	Paper chart
	navigation for the entire voyage, in the event of an ECDIS failure?	IVA	rapel cliait
6	Is the ship is equipped with the latest updates and new editions of ENCs for entire	YES	
	voyage?		
	Has the ENC Correction Log been completed?	YES	
7	is the "Approve Until" and "Display unit" - current date to be used in order to display	YES	
	the updated situation correctly? The ship is equipped with correct usage bands for the entire upcoming voyage. The		
8	whole route is available, at the appropriate scales.	YES	
	Back-up-get me home charts' are the latest editions and updated. Chart correction log		
9	is completed.	YES	
10	Chart datum (WGS 84) set correctly.	YES	Initial setting
11	Check the time and date set correctly.	YES	
12	Equipment malfunction alarm set.	YES	
13	Radar overlay tested and picture adjusted.	YES	Radar overlay
			dialog box.
14	The previous voyage log, details log, and danger target log backed up to floppy disk	NA	
15	and emptied. All Logs reset for next voyage. Reset distance and trip counter.	YES	
16	Power supply (both emergency and changing supplies: as per Ch. II-1, SOLAS)	YES	
	Repetitive checks to be carried out to ensure all T and P notices and Navigational	123	
16a	warning are updated on ENCs having Admiralty Information Overlay (AIO) and Navtex	YES	
	Overlay		
	Initial Settings		
17	ECDIS Navigation parameters including Ship and Route parameters set properly.	YES	Navigation
			parameters
18	Chart Alarm parameters set in accordance with voyage plan and Master's standing orders.	YES	Chart alarm
	orders.		parameters Chart alarm
19	Alerts to be chosen as per Voyage plan.	YES	parameters
	Verifying Configuration of Navigation Sensors		parameters.
	Check that:		
	a. There is agreement between sensor data and its presentation on the ECDIS system.		
20	b. The ship is in the correct position on the ECDIS and	YES	
	c. The ship's vector is aligned.		
	-		
	"Primary" navigation position sensor set.		
21	DGPS as Primary, Kalman (or other) filter off,	YES	Sensors dialog
21	Dead-reckoning ticked off,	ILJ	box
	Chart align ticked off.		
	Speed/Course sensors set properly.		
22	Choose both Log and Dual log.	YES	Sensors dialog
	Choose both Gyros no.1 and no.2 (where available).		box
	Other sensors -		
23	Depth below transducer,	YES	Sensors dialog
	AIS Danger and		box
	Lost targets set properly as per Voyage Plan.		Sensors dialog
25	Set UKC as per Company policy for shallow or confined waters.	YES	box
	O.O.W. are aware that when depth alarm sounds at depth value mtrs, he needs		
26	to change setting to next value as per Voyage plan and the Echo sounder must be	YES	Sensors dialog
	"ON".		box
27	Check Loss of primary positioning information alarm set.	YES	
28	Check Dead-reckoning is available in the event of GPS failure.	YES	
	Controlling Visible Chart and Navigation Features (Chart Display and Symbol Display)		
29	Chart display Page Chart: Shallow contour, Safety contour, Depth contour Safety depth to be set in accordance with Voyage Plan.	YES	Chart Display dialog box

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30 Chart Symbol Boun Light Shall Upda 31 Chart 32 Chart			
30 Chart Symbol Boun Light Shall Upda 31 Chart 32 Chart	se are guidance setting, however the vessel may choose settings as per	YES	
30 Chart Symb Dept Boun Light Shall Upda 31 Chart 32 Chart	veniance		
30 Dept Boun Light Shall Upda 31 Chart	t display Page Chart to be set as follows:		
30 Dept Boun Light Shall Upda 31 Chart 32 Chart	t Alert Highlight: ON.		
Boun Light Shall Upda 31 Chart 32 Chart	bols: Paper Chart		
Boun Light Shall Upda 31 Chart 32 Chart	th: MULTICOLOUR	\	Cl . D. I
Light Shall Upda 31 Chart 32 Chart	ndaries: Symbolized	YES	Chart Display
Shall Upda 31 Chart 32 Chart	t sector: Full	1	
Upda 31 Chart 32 Chart	low pattern: Diamond	-	
31 Chart		-	
32 Char	ate Highlight: All effects		
	t Display Standard: all features to be chosen.	NA	
	t Display Other 1: all features except "Additional info" to be chosen.	NA	
33 Chart	t Display Other 2: all features to be chosen.	NA	
			Symbol Display
34 Symb	bol Display "Route": all features to be chosen.	NA	dialog box
35 Symb	bol Display "Tracking": all features to be chosen.	NA	Symbol Display
,			dialog box Symbol Display
36 Symb	bol Display "Targets": all features to be chosen.	NA	dialog box
37 Symb	bol Display: all features except "Only radar part of Symbols" to be chosen.	NA	Symbol Display dialog box
1 38 1	bol Display "General". The following features to be chosen: Beam width, AIS ines - ON,	NA	Symbol Display dialog box
	Symbol display and Chart display setting.	YES	uialog box
11	the IHO proclib 4.0 tests been conducted in the last 2 areaths? Good are the		
	the IHO preslib 4.0 tests been conducted in the last 3 months? Send results to		
	t provider? Enter date of test done in remarks.		
40 See n	note below about sending results to IHO.	YES	
	e is no need to repeat the check *except after a software update, system upgrade or change		
***************************************	uipment.The results should be reported to the IHO *if and only if anomalies are found*.		
L Joy cut			
	Passage Plan – Information required on ENC and Passage Plan		
A rou	ute plan from berth to berth completed including all main parameters such as		
Lat/L	Long of waypoints, courses and distances, channel limits, WO positions, turning		
1 41	us, max and min speed limits for the leg (all these requirements have been	YES	
1			
 	ered by ECDIS "Plan" function).		
	rnate route(s) available (if navigation situation required)	NA	
43 Dista	ances To Go and ETA's	YES	
44 NO G	GO Areas Marked	YES	
<u> </u>	points - Range and Bearing	YES	
		 	
<u> </u>	ling lines marked and annotated.	YES	
ļ	l Streams and Currents which can affect navigation annotated.	YES	
48 Rada	ar Conspicuous Targets	YES	
	llel Indexing	YES	
50 Marg	gins Of Safety shown as Clearing bearings and ranges of navigational marks.	YES	
51 Marg	ging Of Cafaty shave as limiting parallel index	VEC	
31 Iviarg	gins Of Safety shown as limiting parallel index.	YES	
	ting Danger Line (LDL) set (additionally to safety depth).	NA	
This is	defined as a line drawn that will indicate limits of safe water. LDL=Draft+Required UKC-Minimum ht of tide		
	positions/Bearings and range for wheel over position	NA	
54 Posit	tion Fixing - Frequency + Primary and Secondary Methods To Be Used	YES	
N.Com	and position fiving to prove the CDC position is somethors and in the con-		
1 55 1	nual position fixing to prove the GPS position is correct especially when	YES	
appro	oaching shore (at first sighting of a navigational mark or land on radar screen).		
56 Echo	Sounder "ON" marked.	NIA	
		NA	
 	fic Expected (Ferries etc.)	YES	
	ed Changes - Commenced / Ended / Sea Passage	YES	
59 Call N	Master / Crew - Enhanced Bridge Manning	NA	
 	d-by for tugs / Anchors cleared - Stand-by at anchors	NA	
 	RPOL, Annex V areas marked (for garbage disposal).	NA	
			
h	arture time set.	YES	
, <u>, , , , , , , , , , , , , , , , , , </u>	orting Points and Details (VTS, Port Control, Oil terminals, etc).	YES	
	: Details Channel	YES	
64 Pilot	ringency Plans / Anchorages	YES	
64 Pilot	rt points/lines	YES	
64 Pilot 65 Cont	ne tested/ Steering gear tested	YES	
64 Pilot 65 Conti 66 Abor	erence to publications: ALRS, ALL, NTM, etc.	YES	
64 Pilot 65 Conti 66 Abor 67 Engir	rence to publications. ALNS, ALL, INTIVI, ELC.	I IES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer	Descriptions in build an advance	1/55	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local	Regulations in brief or reference to local regulations if required.	YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to		
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local		YES YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Rooth	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to		
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. The charts for upcoming voyage completed	YES YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n 71 User 72 User	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. charts for upcoming voyage completed charts in the monitoring mode.	YES YES YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n 71 User 72 User 73 Planr	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. The charts for upcoming voyage completed The charts in the monitoring mode. The charts for upcoming voyage completed.	YES YES YES YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n 71 User 72 User 73 Plant 73 Plant	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. The charts for upcoming voyage completed The charts in the monitoring mode. The charts for upcoming voyage completed. The charts in the monitoring mode. The charts in the monitoring mode.	YES YES YES YES YES YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n 71 User 72 User 73 Plant 74 The s	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. The charts for upcoming voyage completed The charts in the monitoring mode. The charts for upcoming voyage completed.	YES YES YES YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n 71 User 72 User 73 Plant 74 The s	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. The charts for upcoming voyage completed The charts in the monitoring mode. The charts for upcoming voyage completed. The charts in the monitoring mode. The charts in the monitoring mode.	YES YES YES YES YES YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n 71 User 72 User 73 Plant 74 The s 75 Deta	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. The charts for upcoming voyage completed The charts in the monitoring mode. The ned Notes for upcoming voyage completed. The ned notes in the monitoring mode. The size of the "safety frame" should be set for each stage of the passage. The ned notes is the monitoring mode. The size of the "safety frame" should be set for each stage of the passage. The ned notes is the monitoring mode. The size of the "safety frame" should be set for each stage of the passage.	YES YES YES YES YES YES YES YES YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n 71 User 72 User 73 Plant 74 The s 75 Deta 76 Voya	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. charts for upcoming voyage completed charts in the monitoring mode. ned Notes for upcoming voyage completed. ned notes in the monitoring mode. size of the "safety frame" should be set for each stage of the passage. nils log has been set.	YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n 71 User 72 User 73 Plant 74 The s 75 Deta 76 Voya 78 Dang	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. charts for upcoming voyage completed charts in the monitoring mode. ned Notes for upcoming voyage completed. ned notes in the monitoring mode. size of the "safety frame" should be set for each stage of the passage. nils log has been set. age log has been set. ger Targets log has been set.	YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n 71 User 72 User 73 Plant 74 The s 75 Deta 76 Voya 78 Dang 79 Chart	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. The charts for upcoming voyage completed The charts in the monitoring mode. The charts in the m	YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n 71 User 72 User 73 Plant 74 The s 75 Deta 76 Voya 78 Dang 79 Chart	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. charts for upcoming voyage completed charts in the monitoring mode. ned Notes for upcoming voyage completed. ned notes in the monitoring mode. size of the "safety frame" should be set for each stage of the passage. nils log has been set. age log has been set. ger Targets log has been set.	YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Ror 71 User 72 User 73 Plant 74 The s 75 Deta 76 Voya 78 Dang 79 Chart 80 Alarr	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. The charts for upcoming voyage completed The charts in the monitoring mode. The charts in the m	YES	
64 Pilot 65 Conti 66 Abor 67 Engir 68 Refer 69 Local 70 A Roo the n 71 User 72 User 73 Plant 74 The s 75 Deta 76 Voya 78 Dang 79 Chart 80 Alarr 81 Set c	oute monitor is "ON" to for permanent monitoring of ship's behavior relative to monitor route. The charts for upcoming voyage completed The charts in the monitoring mode. The ned Notes for upcoming voyage completed. The ned notes in the monitoring mode. The size of the "safety frame" should be set for each stage of the passage. The ned notes in the monitoring mode. The size of the "safety frame" should be set for each stage of the passage. The neglegon has been set. The size log has been set.	YES	

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83	Confirm checked conditions of the route plan	YES	
84	The route has been transferred to the backup ECDIS before departure.	YES	
85	Estimated times of arrival at critical points in the Voyage plan.	YES	
86	Plan route, User Charts and Notes have been backed up/copied to floppy disk.	YES	
	Dangerous Tracked Targets Setting		
88	Source of Tracked Targets to be set (No.2 radar/ARPA).	YES	
89	Targets set as follows: TT DISP ON < AIS DISP ALL (AIS set for priority).	YES	Information area
90	CPA and TCPA limits set properly.	YES	Information area
91	Danger alarm for dangerous AIS and TT tracked targets enabled.	YES	Target alarm dialog box
92	Lost tracked target alarm enabled. AIS and TT: max range nm, min speed knots,	YES	Target alarm dialog box
93	Past position of tracked targets	YES	Information area

Name of O1 LIU YINGJIE Rank: C/O Signature: Date: 21/JUN/18

Name of O1 LI BINGRU Rank: 2/O Signature: Date: 21/JUN/18

Name of OI ZHANG CHUANBO Rank: 3/O Signature: Date: 21/JUN/18

Name of Officer: Rank: Signature: Date:

Name of Officer: Rank: Signature: Date:

Name of Officer: Rank: Signature: Date:

Name of Ma ZHANG MINGFU

Signature: Date: 21/JUN/18

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Voyage Plan: Part I - Berth to Pilot

Departure Port: PUNTA LOBITOS

Wpt	Latitude	•				Longitude				To Wpt	Course
1	S	10	0	5. 90	,	W	78	0	10.90	2	270
2	S	10	0	5. 90	,	W	78	0	11.50		
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Voyage : '	V1804			Weather Allow (See notes on Instruction page)	Voyage :	Tide Allow.	
Distance	Rem.Dist.	Dist. Run	Name WP	[m]	Depth [m]	(+/-)	
0.59	0.59		Punta Lobitos Berth	0.1	31.0	1.0	
	6.00	0, 59	Punta Lobitos P/S	0.1	64.0	1.0	

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PASSAGE PLANNING FORM Berth to Pilot

FORM NO: MAROPS 005

	CLIP 21-Ju	PER BLISS ın-18		***	FROM:	NO.1			TO: TIDE DATUM:	Pilot Stat	ion .5	×			Voyage		V1804	×		
	***************************************									***************************************			REFER CAUTION ON SQUAT UKC B SHEET	FOR ECDIS	VESSELS ONLY					
WPT No.	Positio	n Ref. L/L	Position Ref. Geog	Course	Tide/ Current	Distance on track	Estimated Speed	Time to next WP [hrs]	Parallel Index Point/Distance	Permitted X.T.E.	Fix Method	Fix Interval	U.K.C. [m]	CATZOC ZONE	UKC ACCURACY	Distance to Dest.	List of Lights ALRS	Sailing Dir'ns	Chart	Required Engine status
1	S 10 W 73	0 [°] 5.9 3 ° 10.9	Punta Lobitos Berth	270	1.5	0.6	4.0	0.1	see chart	NA	GPS/Radar/ Visual	5mins	21.62	A2	1.62	0.6	NP80	NP7	P2135	Maneuver Speed
2	S 10 W 78	1. Tel. L/L 2	Punta Lobitos P/S		1.5		10.0		see chart	0.1 nm	GPS/Radar/ Visual	5mins	53.92	A2	2.28	0.0	NP80	NP7	P2135	Full Speed
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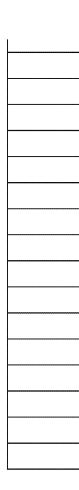
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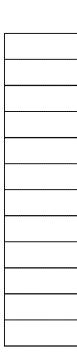
Prepared by:	Li Bingru (2/O)	Zhang Mingfu	Liu Yingjie	Zhang Chuanbo
	(2/0)	Master:	C/O:	3/0:
	4th Officer	Dk Cadet		

-	FOR ECDIS VESSELS ONLY ATZOC UKC
	20.00
	51.64

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Cell: P7
Comment: Sundeep Sharma (IN-SDC):
ECDIS vessels may write continuous

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ED_002238_00001363-00030



FORM NO: MAROPS 005

SQUAT CALCULATION CLIPPER BLISS

UKC BERTH TO PILOT

Please enter 1 (SW) or 2 (DW/FW)

Heel Correction (in m) 0

Formula for squat calculations				
Briefly:		/aters:- $xC_bx(V^2/100)$ ers:- $c_bx(V^2/100)$ in knots nt		
An approximate calculation "rule of thui estimating on the high and safe side:	mb"			
Squat (mtrs) = $V_K^2/100$ for open Seas and Squat (mtrs) = 2 x ($V_K^2/100$) in con	fined waters			
where $V_{\mbox{\scriptsize K}}$ is vessel's speed in knots (speed	through water, not GPS Speed)			
Sea Water Calculation			1	i oi ilitellilediate
	Dock Water /Fresh Water C Dock Water/Fresh Water A	2000000000	2	water densities and FW

Speed	SQ-O	SQ-C				
2	0.03	0.07				
2.5	0.05	0.10				
3	0.07	0.15				
3.5	0.10	0.20				
4	0.13	0.27				
4.5	0.17	0.34				
5	0.21	0.41				
5.5	0.25	0.50				
6	0.30	0.60				
6.5	0.35	0.70				
7	0.41	0.81				
7.5	0.47	0.93				
8	0.53	1.06				
8.5	0.60	1.20				
9	0.67	1.34				
9.5	0.75	1.49				
10	0.83	1.66				
10.5	0.91	1.83				
11	1.00	2.00				
11.5	1.10	2.19				

CAUTION

ECDIS vessels must take into account the effect of "UKC accuracy" in col R when calcuating the vessels UKC particularly when the UKC is very low. Local data/pilots and other sources of data must be consulted when the UKC policy is not complied with, after applying the UKC

Rev : 13

ED_002238_00001363-00031

		UKC CALCULATION FOR					BERTH TO	PILOT				applicable to ECDIS	NON ECDIS	
					•							vessels	3	
From	То	Min available	Speed	Max	DWA/FWA	Static	Tide Allow.	Squat	Weather	Heel	Effective	Resulting UKC	Is the UKC	
WP	WP	Depth between	Applied	SW Draft	(if appl.)	Draft	(+/-)	Correction	Allowance	Correction	Draft	(without CATZOC)	Sufficient	
		Waypoints	[kn]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	as per BSM	Required UKC in %
		vvaypoints	fixid	[111]	[111]	[,,,,]	[111]	[111]	[111]	[''']	[''']	[11]	as per bom	11 70
1	2	31.0	4.0	10.15	0.00	####	1.00	0.13	0.10	0.00	10.28	21.62	YES	15
2		64.0	10.0	10.15	0.00	####	1.00	0.83	0.10	0.00	10.98	53.92	YES	15
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7 7.5 8 8 8 5 9	
7 7.5 8 8 8.5 9	
7 7.5 8 8.5 9 9.5	
7 7.5 8 8.5 9	
7 7.5 8 8 5 9	
7 7.5 8 8.5 9.95	
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7 7.5 8 8.5 9 9.5	
7 7.5 8 8.5 9 9.5 10	
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7,5 8,85 9,95 10 10,5 11,5	

	FOR E	CDIS VESSELS ONLY	For EC	DIS vessels			
SQUAT CORRECTION TYPE			UKC (with CATZOC)				
OPEN / CONFINED	CATZO C ZONE As per CATZO Zone		CATZOC UKC	Is CATZOC UKC sufficient?			
OPEN	A2	1.62	20.00	Yes			
OPEN	A2	2.28	51.64	Yes			

Cell: N46

Comment: Sundeep Sharma (IN-SDC):

This column gives compliance with UKC policy without subtracting UKC accuracy from depth

Cell: Q46

Comment: Sundeep Sharma (IN-SDC):

Select the CATZOC zone

Cell: R46

Comment: Sundeep Sharma (IN-SDC):

This gives the value of CATZOC ZONE accuracy and can be applied manually to the UKC

Cell: S46

Comment: Sundeep Sharma (IN-SDC):

This column calculates UKC taking into account UKC accuracy



FORM NO : MAROPS 005

Voyage Plan: Part II - Pilot to Pilot

Voyage : V1804 Weather Allow Tide (See notes on Departure Port: PUNTA LOBITOS Arrival Port: QING DAO Allow. Instruction page) Latitude To Wpt Course Dist. Run Name WP Wpt Longitude Distance Rem.Dist. [m] 000 10 0 5.90 2 S 78 ⁰ #### 3 318 971.50 9,254.29 Punta Lobitos P/S 0.1 64.0 1.0 3 Ν 2 0 0.00 89 0 0.00 4 313 1,773.92 8,282.79 971.50 0.1 2135.0 1.0 3 4 6,508.87 Ν 22 0 #### 111 ⁰ 5.00 5 310 763.76 2,745.42 4 0.1 3201.0 1.0 5 Ν 30 ⁰ #### 122 ⁰ 0.00 6 291 2,868.81 5,745.11 3,509.19 0.1 541.0 1.0 6 Ν 47 ⁰ #### 2,876.29 180 ⁰ 0.00 261 1,355.48 6,378.00 0.1 625.0 1.0 6 7 Ν 0.00 148 236 250.29 1,520.82 7,733.48 3215.0 1.0 **44** ⁰ 0.00 8 7 0.1 8 Ν #### 143 #### 270 109.09 1,270.53 7,983.76 0.1 2547.0 1.0 9 Ν 1,161.44 41 0 #### 140 ⁰ #### 10 54.65 8,092.85 0.1 4521.0 1.0 235 9 10 Ν 139 11 233 661.14 1,106.79 8,147.51 1.0 **41** 0 8.00 0 #### 10 0.1 3210.0 11 Ν 12 65.74 445.65 #### 128 0 #### 239 8,808.65 11 0.1 2546.0 1.0 12 Ν 33 ⁰ #### 379.91 127 ⁰ #### 13 65.23 8,874.39 12 0.1 3320.0 1.0 263 13 Ν **33** 0 126 0 #### 295 304.88 314.68 8,939.62 13 451.0 1.0 14 0.1 14 Ν 35 120 9.79 1.0 #### 0 #### 15 9.79 9,244.50 14 0.1 325.0 15 Ν **35** ⁰ #### 120 ⁰ #### 0.00 9,254.29 QingDao P/S 0.1 32.0 1.0

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PASSAGE PLANNING FORM PILOT TO PILOT

FORM NO: MAROPS 005

MV	CLIPPER BLISS	FROM:	Pilot Station	TO:	Pilot Station	Voyage	V1804
DATE:	21-Jun-18				*		

				·			· · · · · · · · · · · · · · · · · · ·				7		REFER CAUTION ON SQUAT UKC PP SHEET		VESSELS ONLY				,		FOR ECDIS VESSELS ONLY
WPT No.		n Ref. L/L	Position Ref. Geog		Tide/ Current	5	Estimated Speed	Time to next WP [hrs]	Parallel Index Point/Distance	Permitted X.T.E.	Fix Method	Fix Interval	U.K.C. [m]	CATZOC	UKC ACCURACY	Distance to Dest.	List of Lights ALRS	Sailing Dir'ns		Required Engine status	CATZOC UKC
2	S 1 W 7	0 [°] 5.9 '8 ° 11.5	Punta Lobitos P/S	318	1.0	971.5	14.0	69.4	See chart	0.5nm	GPS/Rad ar/Visual	30mins	53.13	В	2.28	9254.3	NP80	NP7	BA3091	Full Speed	50.85
3	W 8	2 ° 0.0 9 ° 0.0	3	313	1.0	1773.9	14.0	126.7	See chart	0.5nm	GPS	1 hour	2124.13	В	43.70	8282.8	NP80	NP7	BA4811	Full Speed	2080.43
4	W 1	22 ° 20.0 11 ° 5.0	4	310	1.0	763.8	14.0	54.6	See chart	0.5nm	GPS	1 hour	3190.13	В	65.02	6508.9	NP80	NP8	BA4802	Full Speed	3125.11
5	W 12	30.0 30.0 32 ° 0.0	5	291	1.0	2868.8	14.0	204.9	See chart	0.5nm	GPS	1hour	530.13	В	11.82	5745.1	NP80	NP62	BA4802	Full Speed	518.31
6	E 18	7 ° 30.0 30 ° 0.0	6	261	1.0	1355.5	14.0	96.8	See chart	0.5nm	GPS	1hour	614.13	С	33.25	2876.3	NP80	NP62	BA4806	Full Speed	580.88
7	E 14	4 ° 0.0 48 ° 0.0	7	236	1.0	250.3	14.0	17.9	See chart	0.5nm	GPS	1hour	3204.13	С	162.75	1520.8	NP85	NP41	BA4805	Full Speed	3041.38
8	E 14	1 ° 39.0 43 ° 18.0	8	270	1.0	109.1	14.0	7.8	See chart	0.5nm	GPS	30mins	2536.13	С	129.35	1270.5	NP80	NP41	BA1800	Full Speed	2406.78
9	E 14	1 [°] 39.0 40 [°] 52.0 1 [°] 8.0	9	235	1.0	54.7	14.0	3.9	See chart	0.5nm	GPS/Rad ar/Visual	15mins	4510.13	В	91.42	1161.4	NP85	NP41	JP10	Full Speed	4418.71
10	E 13	39 ° 52.0 34 ° 27.0	10	233	1.0	661.1	14.0	47.2	See chart	0.5nm	GPS GPS/Rad	1 hour	3199.13	A2	65.20	1106.8	NP85		BA2293	Full Speed	3133.93
11	N 3	28 ° 46.0 33 ° 53.0 27 ° 38.0	11 12	239 263	1.0	65.7 65.2	14.0	4.7 4.7	See chart See chart	0.5nm 0.5nm	ar/Visual GPS/Rad ar/Visual	15mins 1 hour	2535.13 3309.13	B A2	51.92 67.40	445.6 379.9	NP85 NP85		BA127 BA127	Full Speed Full Speed	2483.21 3241.73
13	N 3	3 ° 45.5 26 ° 20.0	13	295	1.0	304.9	14.0	21.8	See chart	0.5nm	GPS	1 hour	440.13	A2	10.02	314.7	NP85		BA3365	Full Speed	430.11
14	E 12	55 ° 55.6 20 ° 44.0 55 ° 59.3	14	292	1.0	9.8	14.0	0.7	See chart	0.5nm	GPS/Rad ar/Visual GPS/Rad	30mins	314.13	A2	7.50	9.8	NP87	NP32B	BA1502	Full Speed	306.63
15		20 ° 32.8	QingDao P/S		1.0		14.0		See chart	0.5nm	ar/Visual	15mins	21.13	A2	1.64	0.0	NP87	NP32B	BA1502 I	Maneuver Speed	19.49
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Rev: 13 Page 49 of 84

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Cell: P7
Comment: Sundeep Sharma (IN-SDC):
ECDIS vessels may write continuous

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ED_002238_00001363-00052



FORM NO: MAROPS 005

## SQUAT CALCULATION FUCLIPPER BLISS

#### UKC PILOT TO PILOT

Formula for squat calculations Briefly:	Squat in confined Waters:- Squat in metres = $2xC_bx(V^2/100)$ Squat in open Waters:- Squat in metres = $C_bx(V^2/100)$ V = Vessel's speed in knots $C_b$ = Block coefficient
An approximate calculation "rule of thumb" estimating on the high and safe side:	
Squat (mtrs) = $V_{K}^{2}/100$ for open Seas and Squat (mtrs) = 2 x ( $V_{K}^{2}/100$ ) in confined water	ers
where $V_{\mbox{\scriptsize K}}$ is vessel's speed in knots (speed through	gh water, not GPS Speed)
Sea Water Calculation	Dock Water /Fresh Water Calculation 2 densities and FW Dock Water/Fresh Water Allowance 1
	Please enter 1 (SW) or 2 (DW/FW) 1  Heel Correction (in m) 0

Snood	SQ-O	SQ-C
Speed		
4	0.13	0.27
5	0.21	0.41
6	0.30	0.60
7	0.41	0.81
8	0.53	1.06
8.5	0.60	1.20
9	0.67	1.34
9.5	0.75	1.49
10	0.83	1.66
10.5	0.91	1.83
11	1.00	2.00
11.5	1.10	2.19
12	1.19	2.39
12.5	1.29	2.59
13	1.40	2.80
13.5	1.51	3.02
14	1.62	3.25
14.5	1.74	3.48
15	1.86	3.73
15.5	1.99	3.98

CAUTION

ECDIS vessels must take into account the effect of "UKC accurate calcuating the vessels UKC particularly when the UKC is very lo other sources of data must be consulted when the UKC policy after applying the UKC Accuracy correction

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ED_002238_00001363-00053

UKC CALCULATION FOR:	CLIPPER BLISS	PILOT TO PILOT	
			Applicable to ECDIS/NON ECDIS

											Applicable to ECDI vesse		
From	To Min available	Speed	Max	DWA/FWA	Static	Tide Allow	Squat	Weather	Heel	Effective	Resulting UKC	1 1	
													Select
WP	WP Depth between	Applied	SW Draft	(if appl.)	Draft	(+/-)	Correction	Allowance	Correction	Draft	(without CATZOC	) Sufficient	Required UKC in %
	Waypoints	[kn]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	as per BSM?	ONG III 70
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4	5 3201.0	14.0	10.15	0.00	10.15	1.00	1.62	0.10	0.00	11.77	3190.13	YES	50 50
5	6 541.0	14.0	10.15	0.00	10.15	1.00	1.62	0.10	0.00	11.77	530.13	YES	50
6	7 625.0	14.0	10.15	0.00	10.15	1.00	1.62	0.10	0.00	11.77	614.13	YES	50
7	8 3215.0	14.0	10.15	0.00	10.15	1.00	1.62	0.10	0.00	11.77	3204.13	YES	50
8	9 2547.0	14.0	10.15	0.00	10.15	1.00	1.62	0.10	0.00	11.77	2536.13	YES	50
9	10 4521.0	14.0	10.15	0.00	10.15	1.00	1.62	0.10	0.00	11.77	4510.13	YES	50
10	11 3210.0	14.0	10.15	0.00	10.15	1.00	1.62	0.10	0.00	11.77	3199.13	YES	50
11	12 2546.0	14.0	10.15	0.00	10.15	1.00	1.62	0.10	0.00	11.77	2535.13	YES	50
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				FOR ECDIS VESSELS ONLY	For EC	DIS vessels
	AT CORREC				UKC (w	th CATZOC)
TYPE -	OPEN/CO	NFINED	CATZOC ZONE	UKC ACCURACY - As per CATZOC Zone	CATZOC UKC	Is CATZOC UKC sufficient?
	OPEN		В	2.28	50.85	Yes
	OPEN		В	43.7	2080.43	Yes
	OPEN		В	65.02	3125.11	Yes
	OPEN		В	11.82	518.31	Yes
	OPEN		С	33.25	580.88	Yes
	OPEN		С	162.75	3041.38	Yes
	OPEN		С	129.35	2406.78	Yes
	OPEN		В	91.42	4418.71	Yes
	OPEN		A2	65.2	3133.93	Yes
	OPEN		В	51.92	2483.21	Yes
	OPEN		A2	67.4	3241.73	Yes
	OPEN		A2	10.02	430.11	Yes
	OPEN		A2	7.5	306.63	Yes
	OPEN		A2	1.64	19.49	Yes
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Cell: N41

Comment: Sundeep Sharma (IN-SDC):

This column gives compliance with UKC policy without subtracting UKC accuracy from depth

Cell: Q41

Comment: Sundeep Sharma (IN-SDC):

Select the CATZOC zone

Cell: R41

Comment: Sundeep Sharma (IN-SDC):

This gives the value of CATZOC ZONE accuracy and can be applied manually to the UKC

Cell: S41

Comment: Sundeep Sharma (IN-SDC):

This column calculates UKC taking into account UKC accuracy



Arrival Port:

Wpt	Latitude				Longitude	•		To Wpt	Ci	ourse
15	N	35	0	#### '	E	120	o ###	# ' 16		282
16	N	36	0	1.50 '	E	120	0 ###	#' 17		281
17	N	36	0	2.00 '	E	120	o ###	#' 18		265
18	N	36	0	1.85 '	E	120	0 ###	# ' 19		244
19	N	36	3	1.45 '	E	120	:	#' 20		266
20	N	36	0	1.40 '	E	120	0 ###	# '	_	
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### FORM NO: MAROPS 005

Voyage : \	/1804		Weather Allow (See notes on Instruction page)	Ain Available Voyage : Charted	5.3	
Distance	Rem.Dist.	Dist. Run	Name WP	[m]	Depth [m]	(+/-)
10.35	16.32		QINGDAO P/S	0.1	32.0	1.5
2.72	5.97	10.35	16	0.1	22.0	1.5
1 62	3.26	13.06	17	0.1	33.0	1.5
0.90	1.63	14.69	18	0.1	18.0	1.5
0.73	0.73	15.59	19	0.1	17.0	1.5
	0.00	16.32	BERTH	0.1	15.6	1.5

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ED_002238_00001363-00073



# PASSAGE PLANNING FORM

FORM NO: MAROPS 005

MV	CLIPPER BLISS	FROM: Pilot Station	TO: Berth <b>0</b>	Voyage	V1804
DATE:	21-Jun-18		TIDE DATUM: 1.5		

19 E 120 ° #### 19 266 1.5 0.7 6.0 0.1 SEE CHART 0.05 ar/Visual 5mins 7.65 A2 0.7 NP87 NP32B 6 Speed												1.5	TIDE DATUM:							21-Jun-18	DATE:
WPT	FOR ECDIS									^											
No.   Position   Position   Ref. Geog   Course   Tide/   Distance   Estimated   Time to next   Parallel Index   Position   Ref. L/L   Position   Ref. Geog   Course   Tide/   Distance   Estimated   Time to next   Position   Ref. L/L   Ref. Geog   Course   Tide/   Distance   Coursent   Time to next   Position   Ref. L/L   Ref. Geog   Course   Tide/   Distance   Coursent   Time to next   Position   Ref. L/L   Ref. Geog   Course   Tide/   Distance   Coursent   Time to next   Position   Ref. L/L   Ref. Geog   Course   Tide/   Distance   Current   Time to next   Position   Ref. L/L   Ref. Geog   Course   Tide/   Distance   Current   Current   Time to next   Position   Ref. L/L   Ref. Geog   Course   Tide/   Current   Time to next   Position   Ref. L/L   Ref. Geog   Current   Time to next   Position   Ref. L/L   Ref. Geog   Current   Time to next   Position   Ref. L/L   Ref. Geog   Current   Time to next   Position   Ref. L/L   Ref. L/L   Time to next   Time to next   Position   Ref. L/L   Ref. L/L   Time to next   Time to next   Position   Ref. L/L   Time to next   Time to next   Time to next   Position   Ref. L/L   Time to next   T	VESSELS						DIS VESSELS	FOR ECE	REFER CAUTION ON SOLIAT LIKE PR												
No.   Position   Position   Position   Position   Position   Position   Position   Parallel Index   Parall	ONLY																				
No.   Position   Position   Position   Position   Position   Position   Position   Parallel Index   Parall		Required														T					
No.   Ref.     Ref.   Geog   Current   on track   Speed   WP [hrs]   Point/Distance   X.T.E.   Method   Interval   [m]   CATZOC   ACCURACY   to Dest.   ALRS   Dirns   status	CATZOC UKC			Sailing	List of Lights	Distance	UKC		U.K.C.	Fix	Fix	Permitted	Parallel Index	Time to next	Estimated	Distance	Tide/	Course	Position	Position	WPT
N   35   35   35   35   35   35   35	UNC	status		Dir'ns	ALRS	to Dest.		CATZOC	[m]			X.T.E.	Point/Distance	WP [hrs]							
15 E 120 ° #### QINGDAO P/S 282 1.5 10.3 6.0 1.7 SEE CHART 0.05 ar/Visual 5mins 22.95 A2 1.64 16.3 NP87 NP32B 2 Speed  N 36 ° 1.5											1										
N   36   1.5   16   281   1.5   2.7   6.0   0.5   SEE CHART   0.05   ar/Visual   5mins   12.65   A2   1.44   6.0   NP80   NP32B   6   Speed	21.31	Speed	2	NP32B	NP87	16.3	1.64	A2	22.95			0.05	SEE CHART	1.7	6.0	10.3	1.5	282	QINGDAO P/S	120 ° ####	15
16 E 120 *### 16 281 1.5 2.7 6.0 0.5 SEE CHART 0.05 ar/Visual 5mins 12.65 A2 1.44 6.0 NP80 NP32B 6 Speed  N 36 2.0  T E 120 *### 17 265 1.5 1.6 6.0 0.3 SEE CHART 0.05 ar/Visual 5mins 23.65 A2 3.3 NP87 NP32B 6 Speed  N 36 1.9  N 36 1.5  N 36 1.4	1 21.01				111 01	10.0	1.01	,	22.00			0.00	022 018 411			10.0	1.0	1 202	unios/io//o		
N   36 ° 2.0   17   265   1.5   1.6   6.0   0.3   SEE CHART   0.05   GPS/Rad   ar/Visual   5mins   23.65   A2   3.3   NP87   NP32B   6   Speed   Speed   N   36 ° 1.5   1.5   1.5   1.5   1.5   0.9   6.0   0.2   SEE CHART   0.05   GPS/Rad   ar/Visual   5mins   23.65   A2   3.3   NP87   NP32B   6   Speed   NP87   NP32B   NP87   NP32B   6   Speed   NP87   NP32B   NP87   NP32	11.21				NDSO	6.0	1 44	۸۵	12.65			0.05	SEE CHART	0.5	60	27	1.5	281	16	120 0 1.5	16
17       E       120 ° ####       17       265       1.5       1.6       6.0       0.3       SEE CHART       0.05       ar/Visual       5mins       23.65       A2       3.3       NP87       NP32B       6       Speed         N       36 ° 1.9       18       244       1.5       0.9       6.0       0.2       SEE CHART       0.05       ar/Visual       5mins       8.65       A2       1.6       NP87       NP32B       6       Speed         N       36 ° 1.5       1.5       1.5       0.7       6.0       0.1       SEE CHART       0.05       ar/Visual       5mins       8.65       A2       1.6       NP87       NP32B       6       Speed         N       36 ° 1.5       1.5       1.5       0.7       6.0       0.1       SEE CHART       0.05       ar/Visual       5mins       7.65       A2       0.7       NP87       NP32B       6       Speed         N       36 ° 1.4       1.4       19       266       1.5       0.7       6.0       0.1       SEE CHART       0.05       ar/Visual       5mins       7.65       A2       0.7       NP87       NP32B       6       Speed	11.21				141 00	0.0	1.44	74	12.03		1	0.00	JEE CHART	0.3	0.0	2.1	1.5	201	10	120 ####	10
N         36 ° 1.9         18         244         1.5         0.9         6.0         0.2         SEE CHART         0.05         GPS/Rad ar/Visual 5mins         8.65         A2         1.6         NP87         NP32B         6         Speed           N         36 ° 1.5         19         266         1.5         0.7         6.0         0.1         SEE CHART         0.05         GPS/Rad ar/Visual 5mins         7.65         A2         0.7         NP87         NP32B         6         Speed           N         36 ° 1.4         19         266         1.5         0.7         6.0         0.1         SEE CHART         0.05         3r/Visual 5mins         7.65         A2         0.7         NP87         NP32B         6         Speed           N         36 ° 1.4         1.4         1.4         1.6         NP87         NP32B         6         Speed	LEAVE IT				ND07	2.2		40	22.65	- Funition	GPS/Rad	0.05	CEE CHART	0.3		1 4 6	1 4 5	2005	47	36 2.0	17
18     E     120 ° ####     18     244     1.5     0.9     6.0     0.2     SEE CHART     0.05     ar/Visual     5mins     8.65     A2     1.6     NP87     NP32B     6     Speed       N     36 ° 1.5     1.5     19     266     1.5     0.7     6.0     0.1     SEE CHART     0.05     ar/Visual     5mins     7.65     A2     0.7     NP87     NP32B     6     Speed       N     36 ° 1.4     3.4     GPS/Rad     GPS/Rad     BA150     Maneuver	LEAVE IT				NPO/	3.3		AZ	23.00		1	0.05	SEE CHART	U.3	0.0	1.0	1.5	200	17		
N 36 ° 1.5 19 E 120 ° #### 19 266 1.5 0.7 6.0 0.1 SEE CHART 0.05 GPS/Rad GPS/R																		1		36 1.9	
19 E 120 ° #### 19 266 1.5 0.7 6.0 0.1 SEE CHART 0.05 ar/Visual 5mins 7.65 A2 0.7 NP87 NP32B 6 Speed  N 36 ° 1.4 BA150 Maneuver	LEAVE IT	Speed			NP87	1.6		A2	8.65	5mins	1	0.05	SEE CHART	0.2	6.0	0.9	1.5	244	18		
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Prepared by:	LI BINGRU (2/O)	ZHANG MINGFU  Master:	LIU YINGJIE C/O:	ZHANG CHUANBO 3/O:
	4th Officer	Dk Cadet		***************************************

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FORM NO: MAROPS 005

### SQUAT CALCULATION CLIPPER BLISS

#### UKC PILOT TO BERTH

Formula for s	quat calculations
Briefly:	

Squat in confined Waters:-Squat in metres =  $2xC_bx(V^2/100)$ Squat in open Waters:-Squat in metres =  $C_bx(V^2/100)$ V = Vessel's speed in knots  $C_b$  = Block coefficient

An approximate calculation "rule of thumb" estimating on the high and safe side:

Squat (mtrs) =  $V_K^2/100$  for open Seas and Squat (mtrs) = 2 x ( $V_K^2/100$ ) in confined waters

where  $V_K$  is vessel's speed in knots (speed through water, not GPS Speed) Sea Water Calculation

Dock Water /Fresh Water Calculation 2 FW

Dock Water/Fresh Water Allowance 0

Please enter 1 (SW) or 2 (DW/FW) 1

Heel Correction (in m) 0

1

Speed	SQ-O	SQ-C
2	0.03	0.07
2.5	0.05	0.10
3	0.07	0.15
3.5	0.10	0.20
4	0.13	0.27
4.5	0.17	0.34
5	0.21	0.41
5.5	0.25	0.50
6	0.30	0.60
6.5	0.35	0.70
7	0.41	0.81
7.5	0.47	0.93
8	0.53	1.06
8.5	0.60	1.20
9	0.67	1.34
9.5	0.75	1.49
10	0.83	1.66
10.5	0.91	1.83
11	1.00	2.00
11.5	1.10	2.19

#### CAUTION

ECDIS vessels must take into account the effect of "UKC accuracy" in col R when calcuating the vessels UKC particularly when the UKC is very low.

Local data/pilots and other sources of data must be consulted when the UKC policy is not complied with, after applying the UKC Accuracy

## UKC CALCULATION FOR CLIPPER BLISS PILOT TO BERTH

Applicable to ECDIS/NON ECDIS

F			•		•							resour		: 
From	То	Min available	Speed	Max	DWA/FWA	Static	Tide Allow.	Squat	Weather	Heel	Effective	Resulting UKC	Is the UKC	
WP	WP	Depth between	Applied	SW Draft	(if appl.)	Draft	(+/-)	Correction	Allowance	Correction	Draft	(without CATZOC)	Sufficient	Select Required
		Waypoints	[kn]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	as per BSM?	UKC in %
15	16	32.0	6.0	10.15	0.00	10.15	1.50	0.30	0.10	0.00	10.45	22.95	YES	50
16	17	22.0	6.0	10.15	0.00	10.15	1.50	0.60	0.10	0.00	10.75	12.65	YES	10
17	18	33.0	6.0	10.15	0.00	10.15	1.50	0.60	0.10	0.00	10.75	23.65	YES	10
18	19	18.0	6.0	10.15	0.00	10.15	1.50	0.60	0.10	0.00	10.75	8.65	YES	10
19	20	17.0	6.0	10.15	0.00	10.15	1.50	0.60	0.10	0.00	10.75	7.65	YES	10
20		15.6	4.0	10.15	0.00	10.15	1.50	0.27	0.10	0.00	10.42	6.58	YES	10
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	FOR E	CDIS VESSELS ONLY	For ECDIS vessels				
SQUAT CORRECTION			UKC (wil	th CATZOC)			
TYPE - OPEN / CONFINED	CATZO C ZONE	UKC ACCURACY - As per CATZOC Zone	CATZOC UKC	Is CATZOC UKC sufficient?			
OPEN	A2	1.64	21.31	Yes			
CONFINED	A2	1.44	11.21	Yes			
CONFINED	A2		LEAVE IT	Yes			
CONFINED	A2		LEAVE IT	Yes			
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CONFINED	A2		LEAVE IT	Yes			
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Cell: N45

Comment: Sundeep Sharma (IN-SDC):

This column gives compliance with UKC policy without subtracting UKC accuracy from depth

Cell: Q45

Comment: Sundeep Sharma (IN-SDC):

Select the CATZOC zone

Cell: R45

Comment: Sundeep Sharma (IN-SDC):

This gives the value of CATZOC ZONE accuracy and can be applied manually to the UKC

Cell: S45

Comment: Sundeep Sharma (IN-SDC):

This column calculates UKC taking into account UKC accuracy